

**DISTRIBUTIONAL AND SYNONYMICAL NOTES ON *HYLEMYA*
(*PEGOHYLEMYIA*) SPECIES (DIPTERA, ANTHOMYIIDAE)**

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Abstract.—Distinguishing characters for *Hylemya betarum* (Lintner) and *H. fugax* (Meigen) are given; *Pegohylemyia macra* Karl is declared a new synonym of *H. betarum*; and Virginia is cited as a southward extension of the North American range of *H. fugax*.

As cited in the Catalog of Diptera in North America (Huckett, 1965a), both *Hylemya betarum* (Lintner) and *H. fugax* (Meigen) are widely distributed in North America. It is apparent that both species are also widespread in the Palaearctic Region. After comparing North American specimens with the excellent figures and descriptions given by the late Willi Hennig (1966-1976, in Lindner's *Die Fliegen der palaearktischen Region*), it is evident that confusion exists in Europe regarding the identity of *H. betarum*. *Pegohylemyia macra* Karl, 1940 (as treated by Hennig, 1966-1976, Lfg. 283, p. 385, etc.) definitely is a NEW SYNONYM of *H. betarum* (Lintner), 1883.

The key to *Hylemya*, subgenus *Pegohylemyia* in Huckett (1965b) includes both *H. betarum* and *H. fugax*. The illustrations in Fig. 1 have been made from North American specimens, those of *H. betarum* from specimens from Madison, Wisconsin, and those of *H. fugax* from specimens from Giles County, Virginia, which is a considerable extension southward of the known North American range ("Alaska to Calif., Wis. to Que., s. to N.Y. and N.S."). The left surstyli of the males (Fig. 1, top) are shown somewhat more in plan view (area of greatest extent) than from a strictly posterior view. The 5th sternum of *H. fugax* bears only fine, very short, pale setae on the mesal margin of its processes, whereas in *H. betarum* there is a conspicuous group of longish, black setae toward the apex mesally, as figured by Huckett (1924, Fig. 109) and more typically by Hennig (1966-1967, Fig. 611). The mesal part of the ventral processes in *H. fugax* is strongly shining, while that of *H. betarum* is dull. The apical part of the female ovipositors (Fig. 1, bottom) shows differences that are most evident in the size and in the amount and length of vestiture of the last ventral plate.

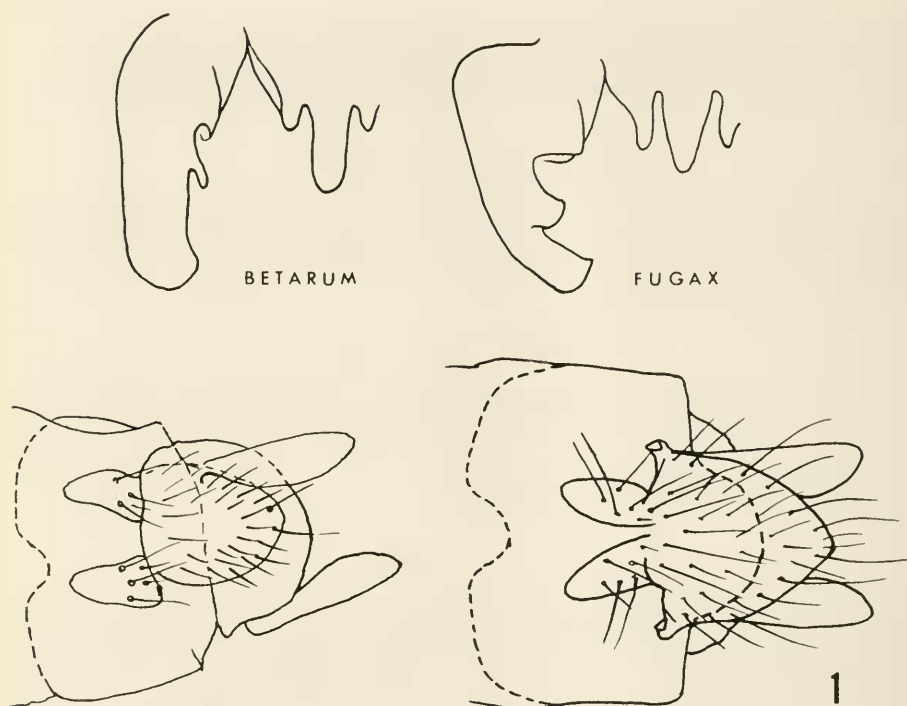


Fig. 1. *Hylemya betarum*, left; *H. fugax*, right. Top, left surstylus and tip of fused cerci (mesolobus) of male. Bottom, apical part of ovipositor of female, ventral view, with setae indicated only on last plate.

The taxon *Pegohylemyia* was considered by Hennig to be of generic rank, whereas I believe that this taxon, and many of the others in the Anthomyiidae treated as genera by Hennig, are best considered subgenera of *Hylemyia*.

Adult flies of both *H. betarum* and *H. fugax* are known to visit flowers of Apiaceae (Umbelliferae) and other plants, apparently contributing to their pollination. Their larvae are apparently saprophagous and are often found following attack of plant tissue by other insects.

LITERATURE CITED

- Hennig, W. 1966-1976. (Family) 63a. Anthomyiidae. In Lindner, E., Die Fliegen der palaearktischen Region 7 (parts 1-3), pp. i-lxxvii, 1-974, pls. i-cxiv.
- Huckett, H. C. 1924. A systematic study of the Anthomyiinae of the New York, with especial reference to the male and female genitalia. Cornell Univ. Agric. Exp. Stn. Mem. 77, 91 pp.

- . 1965a. Subfamily Anthomyiinae, pp. 843–869. *In* Stone, A. et al., A catalog of the Diptera of America north of Mexico. U.S. Dep. Agric., Agric. Handb. 276.
- . 1965b. The Muscidae of northern Canada, Alaska, and Greenland (Diptera). *Mem. Entomol. Soc. Can.* 42, 369 pp.